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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,591	09/30/2003	Bjarne Schon	M61.12-0540	9926
27366 7590 06/09/2009 WESTMAN CHAMPLIN (MICROSOFT CORPORATION) SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402				
EXAMINER				
DANNEMAN, PAUL				
ART UNIT		PAPER NUMBER		
3627				
MAIL DATE		DELIVERY MODE		
06/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,591

Applicant(s)

SCHON, BJARNE

Examiner

PAUL DANNEMAN

Art Unit

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-11, 13-22, 24-25 and 28-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 13-22, 24-25 and 28-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 March 2009 has been entered.

Response to Amendment

2. Claims 1, 3-4, 22, 24-25, 28 and 36-38 have been amended.
3. Claims 2 and 26-27 have been cancelled.
4. The pending Claims 1, 3-11, 13-22, 24-25, and 28-39 have been examined in this action.

Response to Arguments

5. The objection to the specification under 35 U.S.C. 132(a) is respectfully withdrawn as applicant has amended Claims 22, 24-25 and 28 to address the objection.
6. The rejection of Claim 1 under 35 U.S.C. § 112, first paragraph is respectfully withdrawn as Applicant has correctly noted that it is in compliance with the written description requirement.
7. The rejection of Claims 22, 24-25 and 28 under 35 U.S.C. § 112, first paragraph is respectfully withdrawn as applicant has amended Claims 22, 24-25 and 28.
8. The rejection of Claim 36 under 35 U.S.C. § 112, second paragraph is respectfully withdrawn as applicant has amended Claim 36.
9. Applicant argues regarding the rejection of Claim 1 under 35 U.S.C. § 103(a) that ***"there appears to be no teaching or suggestion of a method that includes 'receiving a list transmitted to a device coupled to the pallet, including at least one item representative of the order' and 'transmitting the list from the first device to a second device on the product moving device'."*** Respectfully, the Examiner must disagree. Swartz in at least Column 2, lines 34-53 discloses a customer selecting items

and having those items added to a list which is stored and the items are collected for pick-up or delivery. Swartz in at least Column 2, lines 54-67 further discloses that when the items are to be collected, either by the customer or an attendant, the collector is provided with a portable hand-held terminal which displays the list of items to be collected. The portable terminal is in communication with a central host (Swartz, Column 5, lines 12-13) and may be provided with a machine code reader to assist in recording selected items from the list. Swartz in at least Column 6, lines 20-23 further discloses that the portable terminal may be a hand-held device or it may be permanently or removably mounted on a shopping cart or other device assigned to carry products selected by a user.

10. Applicant further argues that ***"Furthermore, Swartz does not appear to teach displaying the list to an operator on a display device remotely located from the device on the pallet."*** Respectfully, the Examiner must disagree, Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

11. Applicant further argues that ***"Swartz is not directed toward a method that employs a pallet that receives a list and transmits it to a product moving device that is engaged with it..."*** Respectfully, the Examiner must disagree as the claims have been amended and there is a new ground of rejection, Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

Swartz in at least Column 46, lines 6-17 further provides for an attendant collecting, from individual shopping lists of multiple customers, items that are placed in electronic bags that are linked to each particular customer (Swartz, Column 46, lines 60-67).

Swan in at least Column 4, lines 19-27 discloses that a tag may be placed on a case containing a collection of items possibly of various types, or on a pallet containing many cases, and so on; a container; a truck or trailer; an airplane; a ship; and a railroad car. Therefore, Claim 1 and the dependent Claims 2-11 and 13-21 are properly rejected.

12. Applicant's arguments regarding amended Claim 22 and its dependent claims are moot based on the new ground of rejection.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. **Claim 24** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 24 recites ***“product moving machine and the pallet are operably, physically coupled to one another.”*** The only support in Applicant's Specification is in the original claim which only provides support for ***“wherein the product moving portion and the product loading portion are separate components that are configured to be coupled together;”***. Appropriate correction is required.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. **Claim 28** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 28 is dependent on cancelled Claim 27, rendering the claim indefinite. For purposes of this examination the Examiner will consider Claim 28 as being dependent on Claim 22.

Claim Rejections - 35 USC § 103

17. **Claims 1, 3-11 and 13-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz et al., US 6,837,436 B2 hereinafter known as Swartz and in further view of Swan et al., US 6,901,304 B2 hereinafter known as Swan.

Claim 1:

With regard to the limitations for an order filling system:

- ***Receiving a list transmitted to a first device coupled to the pallet, including at least one item from the list;***
- ***Transmitting the list from the first device to a second device on the product moving device;***
- ***Displaying the list to an operator on a display device on the product moving device;***

Swartz in at least Column 2, lines 54-60 discloses a portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

- ***Placing an item on the list on the pallet;***

- ***Detecting an item placed on the pallet by receiving a signal from a tag on the item and identifying the item based on the received signal;***
- ***Reflecting detection of the item on the list displayed on the display device; and***

Swartz in at least Column 2, lines 12-21 discloses a portable shopping and order fulfillment system retrieving associated data files stored at remote addresses through a wireless communication network and storing the list on the portable terminal (Swartz, Column 7, lines 50-51). Swartz in at least Column 2, lines 41-53 further discloses that an authorized user may remotely or locally access the order system to create a shopping list for items that the user may pickup individually at the store or the shopping list may be used to collect the items for delivery. Swartz in at least Column 2, lines 54-60 still further discloses that when the items are collected, either by the customer or an attendant, the collector is provided with a portable hand-held terminal which displays the list of items to be collected. The portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 6, lines 20-23 discloses that the portable terminal may be a hand-held device or it may be permanently mounted or mounted in a manner that the portable terminal is removable from a shopping cart or other device designed to carry products selected by a user.

Swartz does not specifically disclose a tag reading pallet, However Swan in at least Column 4, lines 19-27 discloses that a tag may be placed on a case containing a collection of items possibly of various types, or on a pallet containing many cases, and so on; a container; a truck or trailer; an airplane; a ship; and a railroad car. Swan in at least Column 4, lines 62-67 discloses that the tag is an RFID (radio frequency identification) tag and can be read without making physical contact with the tag. Swan in at least Column 4, lines 67 and Column 5, lines 1-9 further discloses that the tag can be passive or active (having processing capacity) and may also be digitally identifiable. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine Swartz's multi-device shopping list transmission with Swan's smart

(active) tag with the motivation of allowing a pallet to contain a list of all items which are on the pallet or will be placed on the pallet.

- ***Electronically displaying a route within the store to obtain items on the list.***

Swartz in at least Column 40, lines 60-67 and Column 41, lines 1-7 discloses that the portable terminal includes a graphical user interface that simulates a store layout, i.e., aisles with items in them as they are stacked within the store permitting customer, store employees and other personnel who stock the shelves to use the graphical user interface to locate the correct location for the items. Swartz in at least Column 41, lines 8-19 further discloses that the system can assist a customer in finding items on the customer's shopping list by presenting graphical images which may blink and/or direction either in graphical format or identification of the aisle and shelf number indicating the location of the items the customer intends on purchasing. Swartz in at least Column 47, lines 59-67 and Column 48, lines 1-5 further discloses that the system may be provided with a GPS system as generally known in the art.

Claims 3-4:

With regard to the limitations:

- ***Receiving data from the tag related to the item at the pallet.***
- ***Receiving a radio frequency (RF) signal from an item's tag.***

Swartz in at least Column 2, lines 21-25 discloses an item being identified by a portable terminal. Swartz in at least Column 4, lines 58-67 further discloses that the portable terminal's machine code reader can be a bar code reader, a radio frequency tag reader, a CCD or CMOS imager or any other type of machine code reader which can decode encoded indicia on an article and/or collect data by means of optical, radio, or other means.

Swan in at least Column 1, lines 52-67 discloses a system including means for receiving from a first enterprise multiple instances of tag-read-data, each instance including information read from a tag bound to an item, the information read including a unique tag identifier read automatically from the tag, each instance also including a location of the corresponding tag and its bound item.

Swan in at least Column 4, lines 19-27 discloses that a tag may be placed on a case containing a collection of items possibly of various types, or on a pallet containing many cases, and so on; a container; a truck or trailer; an airplane; a ship; and a railroad car. Swan in at least Column 4, lines 62-67 discloses that the tag is an RFID (radio frequency identification) tag and can be read without making physical contact with the tag.

Claims 5-6:

With regard to the limitations:

- ***Shopping list includes the desired quantity for each item.***
- ***Displaying on the display device the desired number of each item on the list on the product moving device.***

Swartz in at least Column 2, lines 54-67 discloses that the portable hand-held terminal displays the list of items to be collected. Swartz in at least Column 20, lines 18-27 further discloses the portable terminal displaying product information such as price, product name, quantity and nutritional information.

Claim 7:

With regard to the limitations:

- ***Deducting the number of the item detected from the desired number of the item in the order; and***
- ***Updating the display device to reflect a new number of the item remaining to fill the order.***

Swartz in at least Column 15, lines 16-30 discloses a customer profile database which maintains records for each customer who has a shopping history. The database has records which include date the customer has shopped, the time of day, the duration of the shopping visits and total products purchased per shopping visit (in quantity and value) and in additional personal information about the customer (unique preferences, age, language, gender, marital status,

number of children, age of children, birthdays, income level, hobbies, educational level, movie/magazine/book preferences, etc.

Swartz in at least Column 20, lines 18-27 further discloses that as the customer proceeds through the retail facility and uses the portable terminal to record purchases including display product information such as price, product name, quantity and nutritional information. Swartz in at least Column 20, lines 33-45 further discloses that the reader on the portable terminal allows a customer to add/delete a product from their record (shopping list). Swartz in at least Column 24, lines 38-42 discloses a register receipt that contains an entire list of items scanned by the customer. Swartz in at least Column 26, lines 31-45 further discloses that the portable terminal displays a list of the items on the customer's shopping list. Swartz in at least Column 29, lines 30-49 further discloses that the customer can scroll through the shopping list and view all the items that have been scanned for purchase.

Swartz in at least Column 40, lines 13-17 further discloses providing customers with promotional messages that compete with items on their shopping list or promoting the purchase of a larger quantity of the product.

Swartz in at least Column 40, lines 46-60 further discloses a customer including items for inclusion in their shopping list and indicating the quantity required for purchase.

Claims 8-10 and 13:

With regard to the limitations:

- ***Indication of next item in the list and the location of that item.***

Swartz in at least Column 40, lines 62-67 discloses the portable terminal with a graphical user interface that simulates a store layout, i.e., aisles with items in them as they are stacked within the store permitting the user to find items within the store. Swartz in at least Column 41, lines 8-14 discloses that the shopping system can assist a customer in finding items on the customer's shopping list by blinking on the display the location of the items.

Claim 11:

With regard to the limitations:

- ***Handling instructions can be received at the display.***

Swartz in at least Column 2, lines 59-67 discloses the portable terminal being provided with item-related information such as delivery instructions and packing requests and in at least Column 3, lines 9-14 illustrative help and instructional files associated with the selected item. Therefore, it would be obvious, at the time of the invention, for one of ordinary skill to modify Swartz's instructions regarding the selected item with a feature to provide instructions with respect to handling and loading and/or packing with the motivation to provide the customer and the person stocking or picking the shelves with information regarding the proper and safe way to handle an item.

Claim 14:

With regard to the limitation:

- ***Querying the operator about additional items not on the list.***

Swartz in at least Column 34, lines 41-67 and Column 35, lines 1-10 discloses that the system can determine a correlation between a scanned item and an item previously purchased, but not currently selected and can display a message to the consumer reminding the consumer that they normally purchase the items. Swartz in at least Column 40, lines 13-23 discloses a customer being provided promotions for items which compete with an item on the list. Swartz in at least Column 40, lines 23-34 further discloses that if a customer scans a related item (e.g., the related item may be a different size or a competing product) not on the list the system may send a message to the customer indicating that the selected item is not on the list. The customer may ignore the message or change their product selection. Swartz in at least Column 38, lines 2-6 further discloses that a customer may receive messages offering discounts for items not on the shopper's list. Swartz in at least Column 34, lines 28-40 discloses sending messages to

customers about products as the customer approaches a product or a specific section of the store.

Claims 15-17:

With regard to the limitations:

- ***Determining if a detected item is or is not on the list or is in a different format.***
- ***Adding the detected item to the shopping list.***
- ***Alerting user that item detected item is not on the list.***

Swartz in at least Column 40, lines 23-34 discloses notifying the customer that an item detected is not on the shopping list, is of a different size or format, or is a competing product and the system is also able to determine the relationship between a scanned item and an item not on the shopping list and the system may send a message to the customer indicating that the selected item is not on the list. Swartz does not specifically disclose that the shopping list is updated on the display with any item detected that's not on the shopping list per se. However, Swartz in at least Column 17, lines 18-29 discloses records related to a particular customer on a particular date indicating the total quantity of items that the customer purchased and a chronological list of the order that each item was selected and purchased. Swartz in at least Column 20, lines 28-40 further discloses that the portable terminal is provided with activation buttons allowing the user to perform various functions like adding an item selected by the consumer to a list of purchased items, a key to remove a previously selected item from the purchase list, a key to perform a price check or other information check and a key to display the total cost of the items selected for purchase.

Claims 18 and 19:

With regard to the following limitations:

- ***Accessing additional data about an item.***
- ***Display device provides access to additional data.***

Swartz in at least Column 5, lines 64-67, and Column 6, lines 1-3 discloses that the portable terminal includes a key for a customer to indicate that they would like additional information about an item (recipe, nutritional, etc.). Swartz in at least Column 33, lines 45-55 further discloses that the customer may download additional information about an item (instructions on use, comparisons to other products, websites, etc.).

Claim 20:

With regard to the limitation:

- ***Directing a shopper or order filler to a checkout area on fulfilling an order.***

Swartz in at least Column 43, lines 55-58 discloses a customer receiving on the portable terminal a notification that an order has been fulfilled or is about to be fulfilled. Swartz in Column 44, lines 6-32 further discloses a customer checking into a checkout queue and a customer being assigned a "window" or an order on the queue wherein the customer can proceed to the checkout counter. The customer's order on the queue may be determined by the order of their signing onto the queue, number and/or type of products and other factors.

Claim 21:

With regard to the limitation:

- ***Removing the item from the list in response to the detection of the item on the product moving device.***

Swartz in at least Column 5, lines 55-67 discloses an item selected by a consumer being de-listed from the purchase list and returned to the shelves of the store. Swartz in at least Column 6, lines 45-59 discloses the product selected being removed from the consumer's shopping list.

18. **Claims 22, 24-25 and 28-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz et al., US 6,837,436 B2, hereinafter known as Swartz and in further view of Swan et al., US 6,901,304 B2 hereinafter known as Swan and further in view of Spriestersbach et al., US 7,020,494 B2 hereinafter known as Spriestersbach.

Claims 22 and 37:

With regard to the limitation for an order filling system:

- ***A first computer system;***
- ***A picklist of order items;***
- ***A product moving machine with a reader connected to the first computer system;***
- ***A display device on the product moving machine for displaying the picklist;***
- ***Picklist is generated at the first computer system and transmitted to the first reader on the product moving machine;***

Swartz in at least Column 2, lines 12-21 discloses a portable shopping and order fulfillment system retrieving associated data files stored at remote addresses through a wireless communication network and storing the list on the portable terminal (Swartz, Column 7, lines 37-51) which has a processor and memory. Swartz in at least Column 2, lines 41-53 further discloses that an authorized user may remotely or locally access the order system to create a shopping list for items that the user may pickup individually at the store or the shopping list may be used to collect the items for delivery. Swartz in at least Column 2, lines 54-60 still further discloses that when the items are collected, either by the customer or an attendant, the collector is provided with a portable hand-held terminal which displays the list of items to be collected. The portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 6, lines 20-23 discloses that the portable terminal may be a hand-held device or it may be permanently mounted or mounted in a manner that the portable terminal is removable from a shopping cart or other device designed to carry products selected by a user.

- ***A pallet having a tag readable by the first reader on the product moving machine, the tag storing pallet identification and data related to the order including the picklist and wherein the tag is configured to read data from the item tag of items placed on the pallet;***
- ***Wherein the tags and readers operate using radio frequency (RF).***

Swartz does not specifically disclose a pallet having an identification tag per se; however Swartz in at least Column 3, lines 42-47 discloses a portable terminal with a unique address on the system. Swartz in at least Column 7, lines 4-21 discloses that the portable terminal is able to communicate with the central host through a wireless device. Swartz in at least Column 9, lines 22-67 further discloses that the portable terminal communicates with hosts and other components linked to a wide area network using Ethernet and IP addresses. Swartz in at least Column 11, lines 54-62 further discloses that to enable personalized communication between the host computer and the portable terminal the host must be able to identify the customer. The customer may enter a personal identification code or a personal identification code stored in the portable device may be transmitted to the host computer. Swartz in at least Column 11, lines 63-67 and Column 12, lines 1-21 discloses that personalized messages could be displayed on the portable terminal based on the customer's profile and/or on the profile of the products selected by the customer. Swartz in at least Column 19, lines 63-67, and Column 20, lines 1-27 discloses that the portable terminal could have a unique identification code associated with the portable terminal and ultimately associated with the customer.

Swartz in at least Column 2, lines 21-25 discloses an item being identified by a portable terminal. Swartz in at least Column 4, lines 58-67 further discloses that the portable terminal's machine code reader can be a bar code reader, a radio frequency tag reader, a CCD or CMOS imager or any other type of machine code reader which can decode encoded indicia on an article and/or collect data by means of optical, radio, or other means.

Swan in at least Column 4, lines 19-27 discloses that a tag may be placed on a case containing a collection of items possibly of various types, or on a pallet containing many cases, and so on; a

container; a truck or trailer; an airplane; a ship; and a railroad car. Swan in at least Column 1, lines 52-67 discloses a system including means for receiving from a first enterprise multiple instances of tag-read-data, each instance including information read from a tag bound to an item, the information read including a unique tag identifier read automatically from the tag, each instance also including a location of the corresponding tag and its bound item.

Spriestersbach in at least Column 12, lines 39-50 and lines 51-67 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to provide location contextual information of a particular pallet based on the pallet ID which is stored on the pallet's RFID tag. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine Swartz's consumer interactive shopping system with the pallet contents of Swan and with the location-aware pallet and forklift system of Spriestersbach with the motivation of having not only the contents of the pallet, but also its location made available to interested parties.

Claim 24:

With regard to the limitation:

- ***Wherein the picklist corresponding to the pallet identification on the tag is transmitted to the display device on the product moving machine when the product moving machine and the pallet are physically coupled to one another.***

Swartz in at least Column 2, lines 54-60 discloses a portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

Spriestersbach in at least Column 12, lines 39-50 and lines 51-67 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to provide location contextual information of a particular pallet based on the pallet ID which is stored on the pallet's RFID tag. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine Swartz's consumer interactive shopping system with the location-aware pallet and forklift system with the motivation of having not only the contents of the pallet, but also its location available to interested parties.

Claim 25:

With regard to the limitation:

- ***The product moving machine is a forklift.***

Swartz and Swan are somewhat silent regarding the use of a forklift. However, Spriestersbach in at least Column 12, lines 39-50 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to take advantage of location context information.

Claim 28:

With regard to the limitation:

- ***Wherein the reader of the product moving machine is configured to receive information from the tag on the pallet as items are placed on the pallet.***

Swartz in at least Column 2, lines 54-60 discloses a portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

Swartz does not specifically disclose a tag reading pallet, However Swan in at least Column 4, lines 19-27 discloses that a tag may be placed on a case containing a collection of items possibly of various types, or on a pallet containing many cases, and so on; a container; a truck or trailer; an airplane; a ship; and a railroad car. Swan in at least Column 4, lines 62-67 discloses that the tag is an RFID (radio frequency identification) tag and can be read without making physical contact with the tag. Swan in at least Column 4, lines 67 and Column 5, lines 1-9 further discloses that the tag can be passive or active (having processing capacity) and may also be digitally identifiable.

Sprietersbach in at least Column 12, lines 39-50 and lines 51-67 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to provide location contextual information of a particular pallet based on the pallet ID which is stored on the pallet's RFID tag. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine Swartz's multi-device shopping list transmission with Swan's smart (active) tag with the motivation of allowing a pallet to contain a list of all items which are on the pallet or will be placed on the pallet.

Claim 29, 31, 33, and 34-35:

With regard to the further limitation of the display device of Claim 22:

- *An order information area;*
- *A location area;*
- *An information area; and*
- *A user interface.*

Swartz does not specifically disclose the display device being updated to reflect the current quantity or the quantity remaining to fill an order per se. However, Swartz in at least Column 17, lines 18-29 discloses records related to a particular customer on a particular date indicating the total quantity of items that the customer purchased and a chronological list of the order that each item was selected and purchased. Swartz in at least Column 20, lines 28-40 further discloses

that the portable terminal is provided with activation buttons allowing the user to perform various functions like adding an item selected by the consumer to a list of purchased items, a key to remove a previously selected item from the purchase list, a key to perform a price check or other information check and a key to display the total cost of the items selected for purchase.

Swartz in at least Column 5, lines 49-53, and Column 7, lines 37-67 further discloses that the portable terminal has a display device that can function as a video display and a data input device. The portable terminal has several input devices including an optical character scanner and memory for storing an electronic shopping list, past purchasing history and/or coupons and location tracking features. Swartz in at least Column 20, lines 18-27 further discloses the portable terminal displaying product information such as price, product name, quantity and nutritional information.

Claim 30:

With regard to the following limitation for the order information area of Claim 29:

- ***An order number area;***
- ***A product loading display area configured to display a pallet identifier number; and***
- ***A picklist area configured to display data related to items on the picklist.***

Swartz in at least Column 11, lines 27-46 discloses the portable terminal having a customer identification number. Swartz in at least Column 13, lines 1-34 further discloses the use of a unique identification number such as a universal product code (UPC) to uniquely identify a product. Swartz in at least Column 38, lines 60-67 discloses uploading a customer's shopping list to a portable terminal. Swartz in at least Column 40, lines 35-60 further discloses that customers can access on the portable terminals list of previously purchased items and may select and add previously purchased items to the current shopping list. Swartz in at least Column 5, lines 49-53, and Column 7, lines 37-67 further discloses that the portable terminal has a display device that can function as a video display and a data input device. The portable terminal has several input

devices including an optical character scanner and memory for storing an electronic shopping list, past purchasing history and/or coupons and location tracking features.

Swan in at least Column 2, lines 20-67 discloses the use of RFID tags with unique tag identifiers and the tags further configured to use an electronic product code of an item as the unique tag identifier and further associating the unique tag identifier with an order document and a shipping document.

Spriestersbach in at least Column 12, lines 39-50 and lines 51-67 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to provide location contextual information of a particular pallet based on the pallet ID which is stored on the pallet's RFID tag.

Claim 32:

With regard to the further limitations of Claim 31:

- ***A location indicator for each item on the picklist.***

Swartz in at least Column 40, lines 60-67 and Column 41, lines 1-7 discloses that the portable terminal includes a graphical user interface that simulates a store layout, i.e., aisles with items in them as they are stacked within the store permitting customer, store employees and other personnel who stock the shelves to use the graphical user interface to locate the correct location for the items. Swartz in at least Column 41, lines 8-19 further discloses that the system can assist a customer in finding items on the customer's shopping list by presenting graphical images which may blink and/or direction either in graphical format or identification of the aisle and shelf number indicating the location of the items the customer intends on purchasing. Swartz in at least Column 47, lines 59-67 and Column 48, lines 1-5 further discloses that the system may be provided with a GPS system as generally known in the art.

Claim 36:

With regard to the following limitation for the order information area of Claim 29:

- ***Wherein the display device is configured to provide an alert if an item not on the picklist is placed on the pallet.***

Swartz in at least Column 40, lines 23-34 discloses notifying the customer that an item detected is not on the shopping list, is of a different size or format, or is a competing product and the system is also able to determine the relationship between a scanned item and an item not on the shopping list and the system may send a message to the customer indicating that the selected item is not on the list.

Claims 38 and 39:

With regard to the further limitation of the order filling system of Claim 22:

- ***A second computer system for generating the picklist; and***
- ***A transmission link between the first computer system and the second computer system;***
- ***A portable electronic device; and***
- ***Wherein the second computer system transmits the order to the portable electronic device; and***
- ***The portable electronic device transmits the order to the first computer system.***

Swartz in at least Column 2, lines 54-60 discloses a portable terminal is in communication with a central host and may have a machine code reader to assist in recording selected items from the list. Swartz in at least Column 39, lines 32-50 provides support for a first, second and third device between which the shopping list may be transferred. The first device could be a key-fob with limited or no display, the second device may be a portable terminal used by the customer having a display attached to a shopping cart with the mode of transmission being optical, acoustical, via radio frequency or a simple hardware connection.

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Spriestersbach in at least Column 12, lines 39-50 and lines 51-67 discloses attaching an RFID tag to each pallet, as well as a tag reader and a location-aware computer system to each forklift to provide location contextual information of a particular pallet based on the pallet ID which is stored on the pallet's RFID tag.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

3 Jun 2009

/F. Ryan Zeender/
Supervisory Patent Examiner, Art Unit 3627